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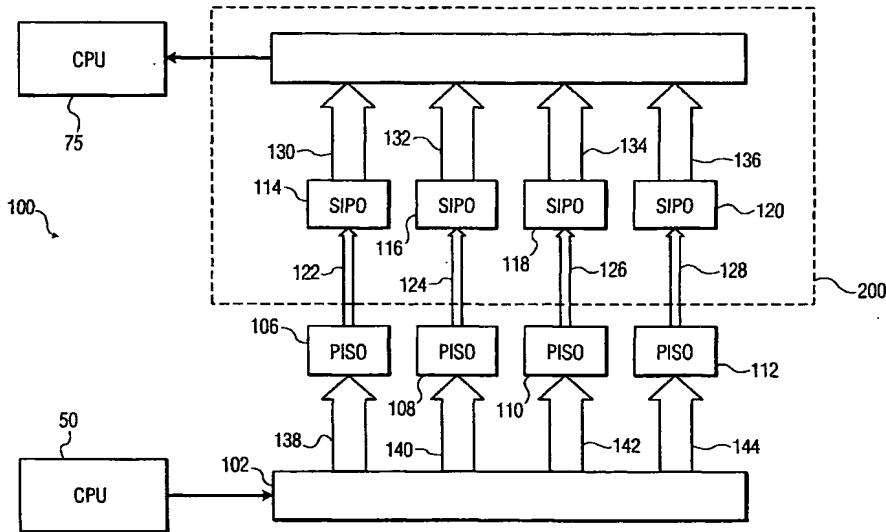
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(54) Title: AUTO REALIGNMENT OF MULTIPLE SERIAL BYTE-LANES



(57) Abstract: Described is a data communication arrangement (100) with a transmit module adapted to convert parallel data words (102) into a plurality of serial data streams (122, 124, 126, 128), the transmit module arranged in a plurality of groups, with each group including a data-carrying line (122, 124, 126, 128). A receive module (200) is adapted to collect the digital data carried from the transmit module (100) over the plurality of data-carrying lines (122, 124, 126, 128). The receive module (200) detects a frequency compensation code, and in response provides a code-detected signal used for aligning the data back into parallel words and mitigating skew-caused re-training and configuration sequences. The receive module (200) may continuously check alignment between the groups and autonomously correct alignment of the plurality of data groups.

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

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